

# Transformable and Transformative Universal ED Patient Room

COA 8823, HSI 8803, CS 8803

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# The Concept of Universal Room

**To treat a patient whatever his/her condition from his/her arrival to his/her discharge in one sole room**



# Problem definition

The main facts about current rooms :

- some equipments in rooms are only partially used
- difficulty to put patient in an appropriate room

# Problem definition

What will we be faced to ?

- all-in one concept needs more resources on operation and maintenance
- acuity-adaptable model needs more staff support
- bigger footprint

# Metrics

- cost of resources
- handy aspect for practitioners and patients
- the utilization rate of the different equipments and of the room at certain period
- practitioners satisfaction survey
- customers satisfaction survey

# Solution directions

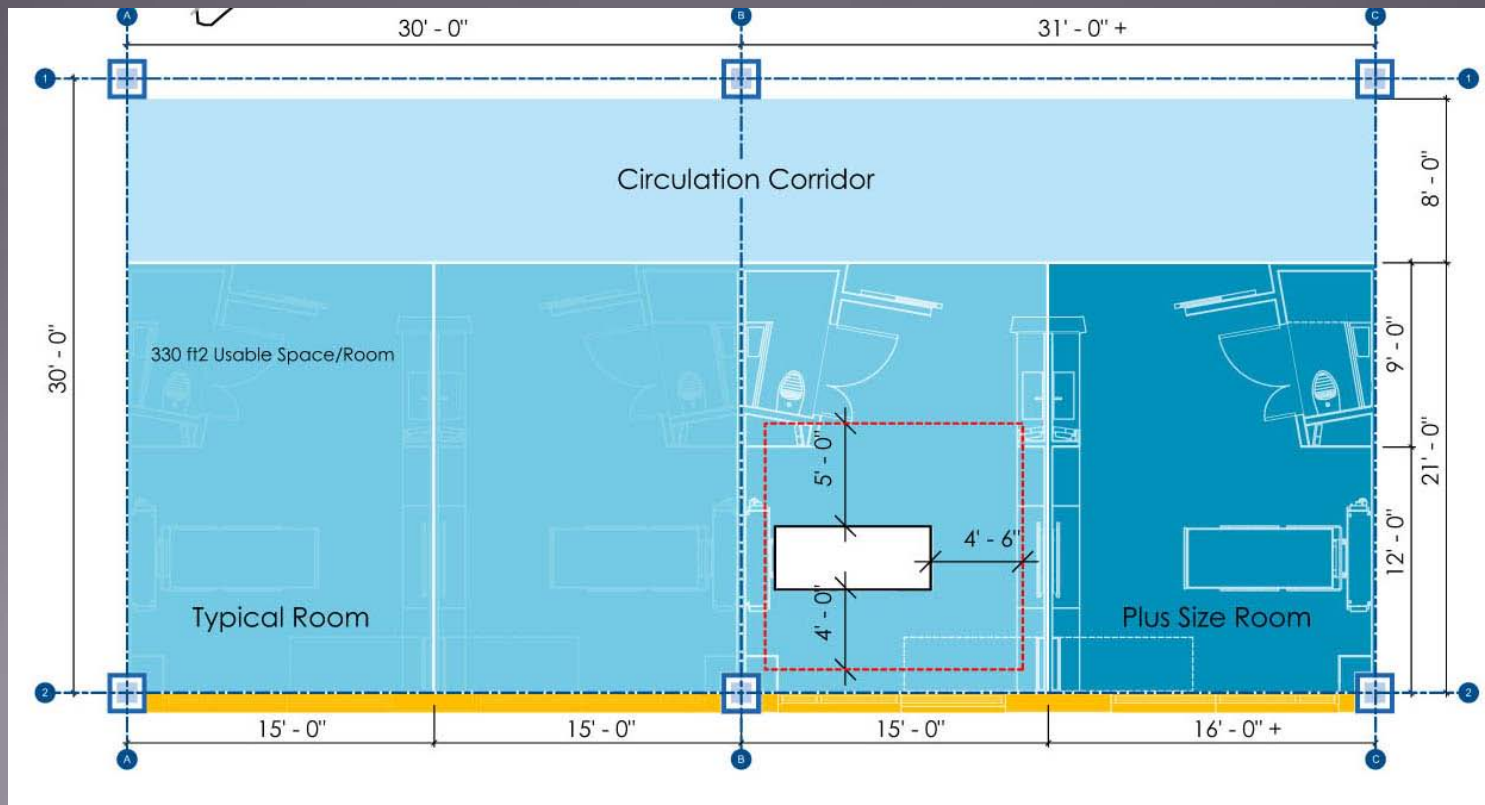
## Prototype Study

- to propose several types of room depending on the range of treatment needed and equipment required

(method : identify what are the resources needed for the treatments and what are the requirement of utilization of the different procedure)

# Solution directions

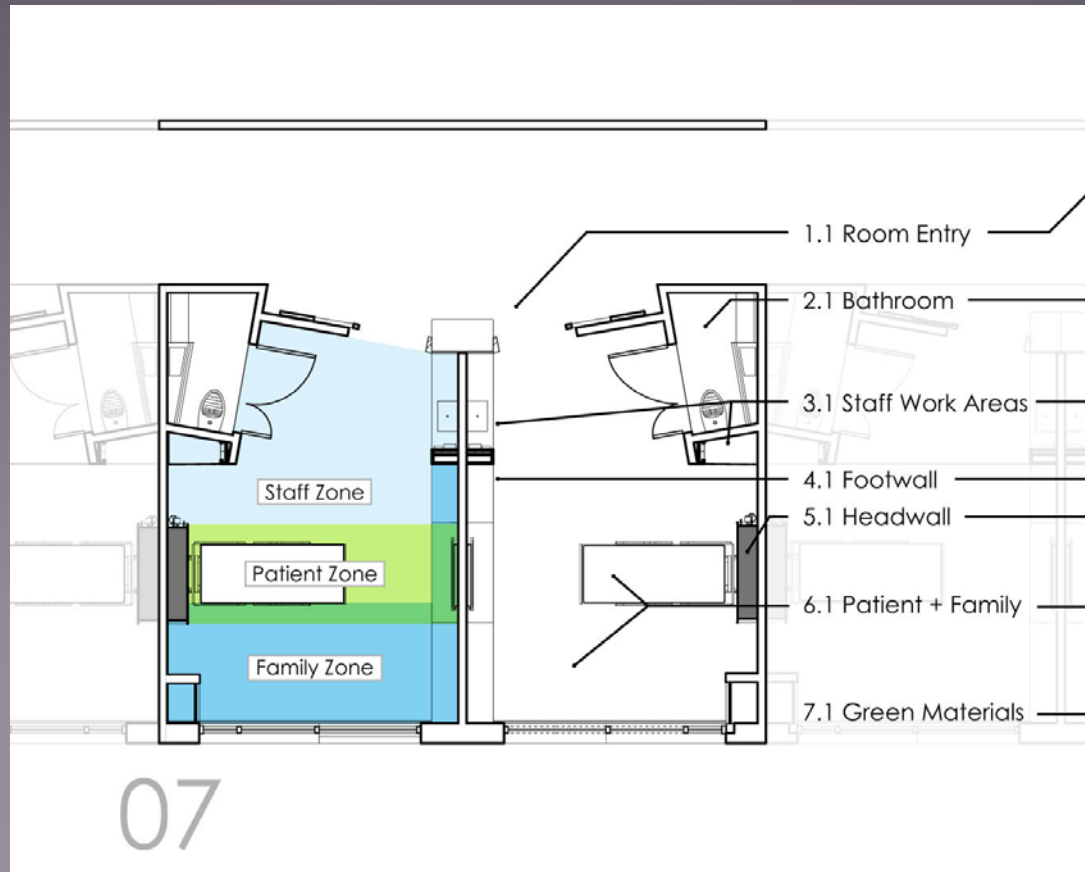
## Prototype Study





# Solution directions

## Prototype Study



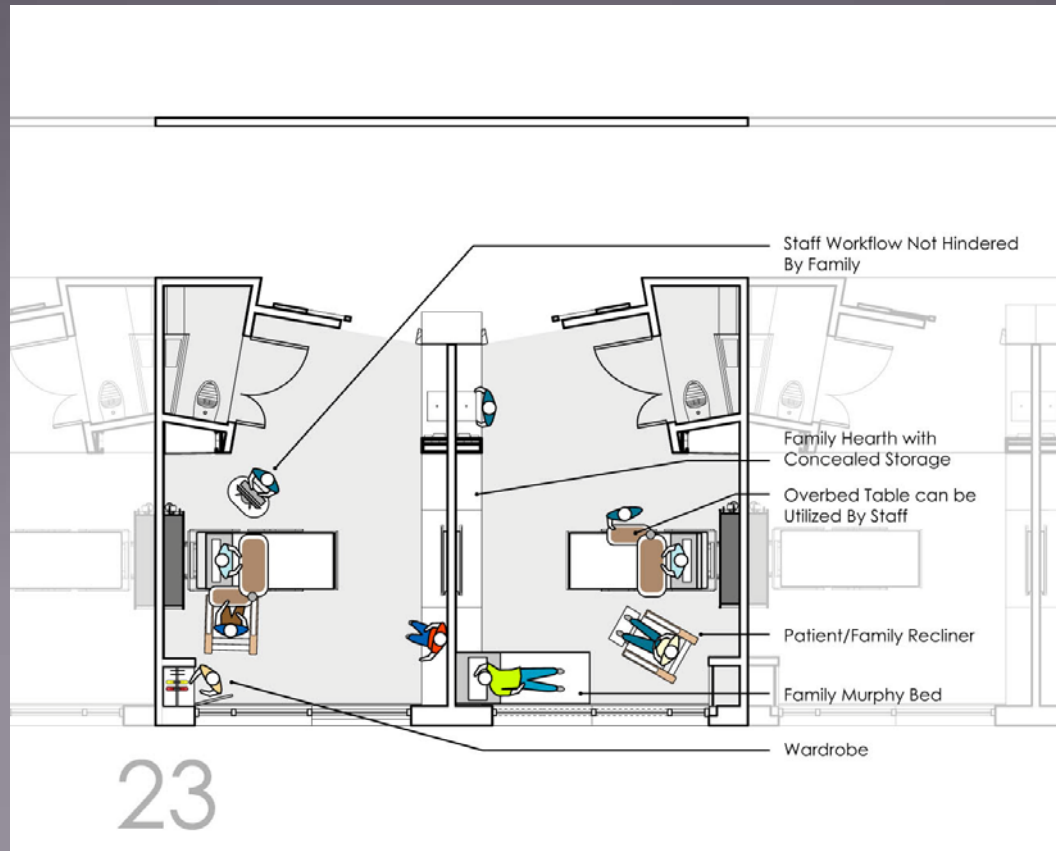
# Solution directions

## Interior Study

- to propose a room layout which meet the functional requirements regarding equipment, fixture, supply and furniture

# Solution directions

## Interior Study



# Solution directions

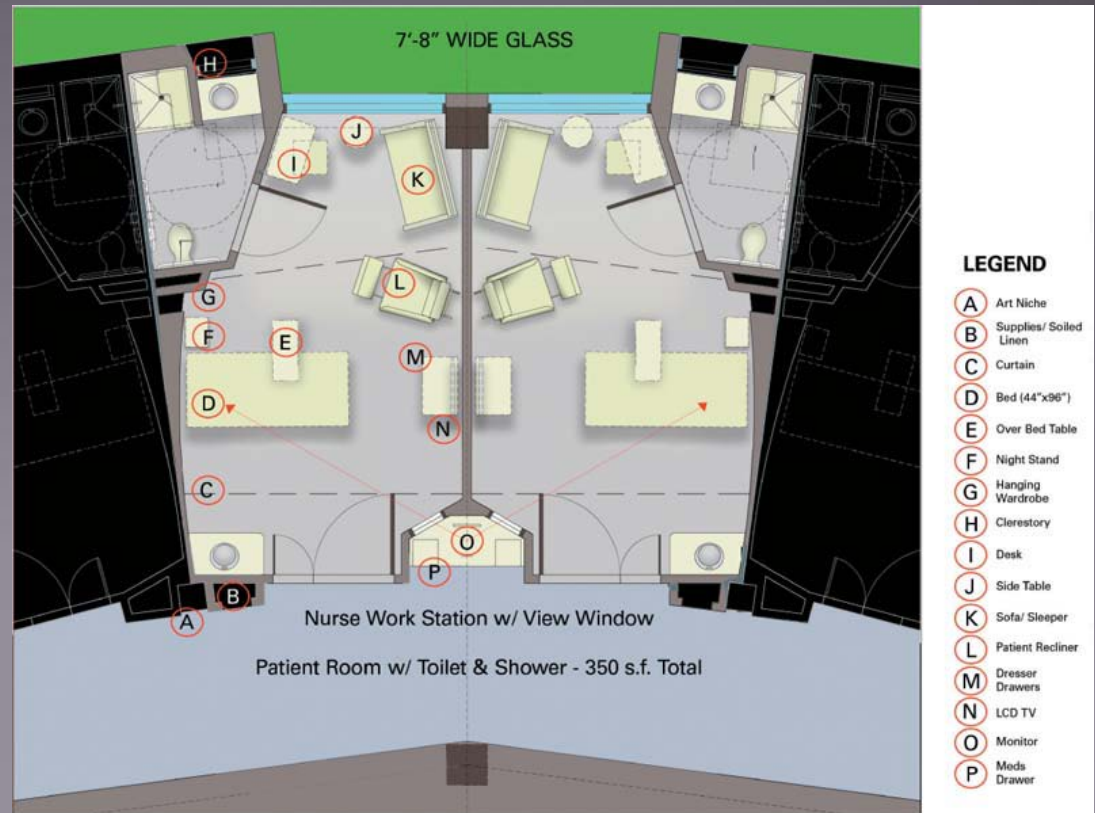
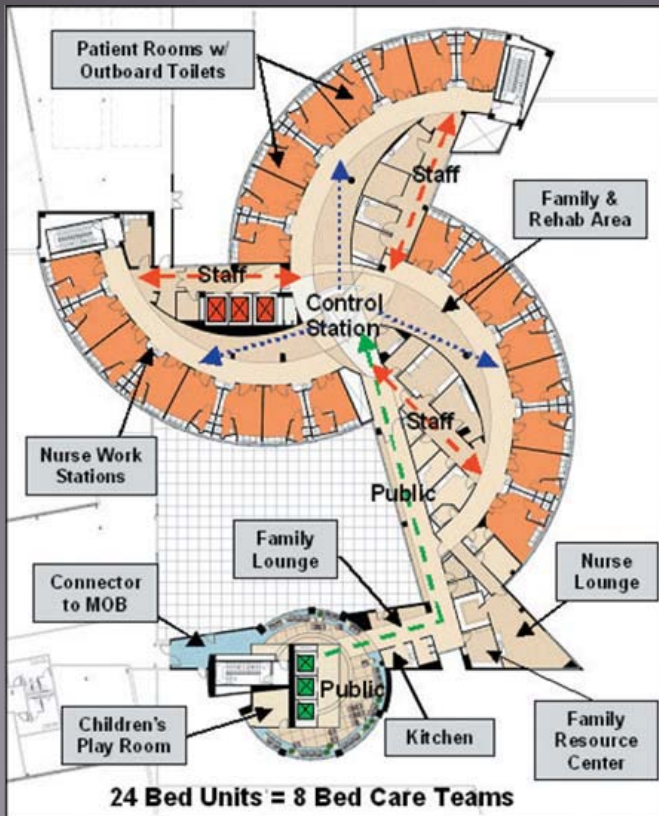
## Adaptive Design Concept

- to propose the possible space layout to combine the functions of different rooms (e.g. ICU, exam room, etc.)

(method : study of scenario of use)

# Solution directions

## Adaptive Design Concept



# Solution directions

## E-Universal Room Concept

- to seek ways of possible procedure of using electronic device to achieve efficiency in terms of operation